

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for detecting ~~whether the interaction of~~ a tyramine receptor binds to a G-protein and triggers ~~with~~ an endogenous G-protein coupled signalling cascade of an erythroid cell comprising the steps of; transforming an erythroid cell ~~produced by the method of~~ according to claim [[7]]6 with a vector comprising a sequence which encodes a tyramine receptor under the control of a globin promoter, incubating the cell with a ligand capable of binding the tyramine receptor, and measuring the cyclic AMP levels or free calcium ion concentration within the cell, comparing the cyclic AMP levels or the free calcium ion concentration with that of an untransformed erythroid cell, and detecting the tyramine receptor binding to a G-protein by observing a difference in the cyclic AMP levels or calcium ion concentrations measured between the transformed and untransformed erythroid cells.

2-5. (Canceled)

6. (Currently amended) ~~[[The]]~~ An isolated erythroid cell ~~according to claim 30 which comprises a cell as deposited at the European Collection of Cell Cultures under Accession number 99012801.~~

7-25. (Canceled)

26. (Currently amended) The isolated erythroid cell according to claim 6 which is transformed with a vector comprising a sequence which encodes ~~an insect G-protein coupled~~ a tyramine receptor under the control of a globin promoter.

27. (Previously presented) The isolated erythroid cell according to claim 26 which has been further transformed such that it contains a globin promoter associated with a reporter cassette containing a β -galactosidase gene under the control of a response element susceptible to modulation by a signalling cascade of said cell.

28. (Previously presented) The isolated erythroid cell according to claim 27 wherein said response element is the Locus control Region (LCR) enhancer, wherein said enhancer is at an optimal distance of said reporter cassette such that the expression of the β -galactosidase gene is dependent on the concentration of a downstream component in the signalling cascade.

29-30. (Canceled)

31. (Currently amended) A method for detecting whether the interaction of a tyramine receptor binds to a G-protein and triggers ~~[[with]]~~ an endogenous signaling cascade of an erythroid cell comprising the steps of: providing the erythroid cell according to claim 27 or 28, incubating the cell in the presence of a ligand capable of binding the tyramine receptor, and measuring the expression levels of the β -galactosidase gene, comparing the β -galactosidase expression levels with those of an untransformed erythroid cell, and detecting the binding of a tyramine receptor to a G-protein by observing a difference between the levels of β -galactosidase expression from transformed and untransformed erythroid cells.

32. (New) The method according to claim 1 wherein the calcium levels are measured by means of a fluorescent indicator.

33. (New) The method of claim 1, wherein the ligand is an agonist or antagonist and the incubation is performed either (I) in (a) the presence and (b) the absence of a potential agonist of the tyramine receptor and/or (II) in the presence of a known agonist and (a) the presence or (b) the absence of a potential antagonist of the tyramine receptor; and measuring and comparing the levels of cyclic AMP or calcium ion of (Ia) and (Ib) and/or (IIa) and (IIb).

34. (New) The method of claim 31, wherein the ligand is an agonist or antagonist and the incubation is performed either (I) in (a) the presence and (b) the absence of a potential agonist of the tyramine receptor and/or (II) in the presence of a known agonist and (a) the presence or (b) the absence of a potential antagonist of the tyramine receptor; and measuring and comparing the levels of cyclic AMP or calcium ion of (Ia) and (Ib) and/or (IIa) and (IIb).